

REMARKS

In response to the Office Action mailed April 12, 2004, Applicant amends his application and requests reconsideration. In this Amendment no claims are cancelled and claims 5 and 6 are added so that claims 1-6 are now pending.

In this Amendment the added claims 5 and 6 are taken from original claims 1, 2, and 4. Claim 5 is a combination of examined claims 1 and 2 with a single word changed from "incapable" to "possible". The Examiner indicated that examined claim 2 was allowable so that claims 5 and 6 should be immediately allowed.

In this Amendment claim 1 is amended for clarity by explaining the operation of the rangefinding incapability determining means appearing in the final paragraph of claim 1. Rather than stating generally that a determination is made as to whether rangefinding is possible, relying upon the index value, the amended claim points out that the rangefinding apparatus determines whether it is possible to determine the distance to the object based upon an index value that is calculated. The index value, as explained in the claim, indicates the degree of oscillation of the autofocus data within a predetermined area of the pair of lines sensors. If that index value indicates a relatively high degree of oscillation, i.e., if the index value exceeds a reference value, then the rangefinder apparatus determines that rangefinding is not possible, i.e., that the rangefinding apparatus is incapable of rangefinding. This amendment of claim 1 is supported within the original disclosure of the patent application, particularly in paragraph [0060] and Figure 5, as well as in other locations of the patent application.

Examined claim 1 and its dependent claim 3 were rejected as anticipated by Kageyama et al. (U.S. Patent 5,960,219, hereinafter Kageyama). This rejection is respectfully traversed, particularly as to the claims 1 and 3 presented here. Since claim 3 depends from claim 1, comments are presented here only with respect to claim 1, because if claim 1 is not anticipated by Kageyama, claim 3 cannot be anticipated by that patent.

In the rejection, the Examiner asserted that the rangefinding incapability determining means, appearing in the final paragraph of claim 1, finds a counterpart in Kageyama at column 11, lines 17-36. Applicant respectfully disagrees. What is described in that portion of Kageyama is that relative object brightnesses and contrast values are calculated for each pair of sensor areas. The contrast value is based upon brightness level differences of neighboring pixels within each of the areas. When the contrast value is too small, then the locations where the first image coincides with the second image become uncertain, meaning that rangefinding becomes inaccurate. If the contrast value is too low, then rangefinding is

In re Appln. of Hideo YOSHIDA
Application No. 10/670,774

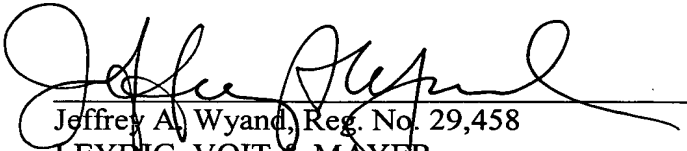
not inhibited in Kageyama. Instead, a different calculation is employed to determine the distance to the object.

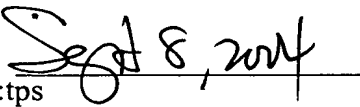
By contrast with Kageyama, in the invention, particularly as defined by amended claim 1, if the index value, indicating degree of oscillation of the autofocus data is too large, than a determination is made that rangefinding is not possible, not that an alternative rangefinding technique should be employed. Thus, Kageyama cannot anticipate claim 1 because Kageyama does not calculate the degree of oscillation of the autofocus data. Rather, Kageyama calculates contrast information which is not equivalent to the index value of claim 1. Further, in Kageyama, an alternative rangefinding technique is employed when the contrast is too small. In the invention, the inability to complete rangefinding is determined when the index value is too large. Finally, although the apparatus of claim 1 completes a determination that rangefinding may be impossible, it does not provide an alternative rangefinding technique is employed when the index is too large. In fact, in the non-limiting embodiment of Figure 5, when the index exceeds the threshold value, rangefinding is terminated.

Because of the differences between the invention as defined by amended claim 1 and its dependent claim 3 and the disclosure of Kageyama, Kageyama cannot anticipate either of those claims as now presented. Comment on claims 2 and 4 is not necessary since claim 2 in its current form is already indicated to be allowable.

Reconsideration and allowance of all of claims 1-6 are earnestly solicited.

Respectfully submitted,


Jeffrey A. Wyand, Reg. No. 29,458
LEYDIG, VOIT & MAYER
700 Thirteenth Street, N.W., Suite 300
Washington, DC 20005-3960
(202) 737-6770 (telephone)
(202) 737-6776 (facsimile)

Date: 
JAW:tps